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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,055	12/06/2001	Ellis T. Fisher	010387	9043
23696	7590	06/07/2005	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			D AGOSTA, STEPHEN M	
			ART UNIT	PAPER NUMBER
			2683	

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/006,055

**Applicant(s)**

FISHER, ELLIS T.

**Examiner**

Stephen M. D'Agosta

**Art Unit**

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14, 18, 22-25, 28 and 29 is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-21, 26, 27 and 31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2683

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection. New art has been applied to reject various claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

#### **Claims 1-4, 5-13, 15-17, 19-21 and 26-27 and 32** rejected under 35

U.S.C. 103(a) as being unpatentable over Magnusson et al. WO99-49690 and further in view of O'Carroll US 6,714,794 (hereafter Magnusson and O'Carroll).

As per **claims 1, 6 and 12**, Magnusson teaches a system comprising:

detecting when a wireless mobile unit is in an high data rate (HDR) area (page 5, L16 to page 6, L12 teaches SIM Card processor receiving/storing data from cell broadcast to include information about an HDR area),

a processor being configured to determine a need for exchanging data between said wireless mobile unit and the base station (BTS) [page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21]; and

A data burst optimizer (DBO) configured to exchange said data between said wireless mobile unit and said BTS in HDR area (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means for exchanging data based on the user's selected application).

**But is silent on a signal strength indicator AND use of CDMA communications AND determining if by determining whether a signal strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level AND automatically exchange data and using CDMA when the strength indicator detects said wireless mobile unit is in said HDR CDMA area and the processor determines a need for exchanging data between the mobile and BTS.**

**O'Carroll teaches a communication system for wireless communications users (CDMA, C4, L35-47), discloses use of signal strength (C3, L23-27 and C8, L23-29) and**

Art Unit: 2683

will automatically transmit data when there is data to send (figure 7 shows that communications will automatically occur when the unit is within a certain area and there is data to transmit).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it uses a signal strength indicator AND use of CDMA communications AND determining if by determining whether a signal strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level AND automatically exchange data and using CDMA when the strength indicator detects said wireless mobile unit is in said HDR CDMA area and the processor determines a need for exchanging data between the mobile and BTS, to provide means for the unit to determine when it can transmit data at high(er) data rates.

As per **claim 2**, Magnusson teaches claim 1 wherein said processor invokes said DBO to automatically exchange said data between said wireless mobile unit and said BTS when said wireless mobile unit is in said HDR area (page 5, L30-35 teaches system selecting the optimal carrier service, eg. HDR, based on the application chosen).

As per **claim 3**, Magnusson teaches claim 1 wherein said DBO is configured to continuously detect when said wireless mobile unit is in said CDMA HDR area (page 5, L16-35 teaches mobile receiving SMS over cell broadcast which one skilled understands can be continuously monitored for local carrier service changes as the mobile roams. The examiner also notes that the mobile unit must continuously monitor for HDR coverage as it roams since roaming out of coverage will terminate the HDR service).

As per **claim 4**, Magnusson teaches claim 1 **but is silent on** wherein said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

Art Unit: 2683

As per **claim 5**, Magnusson teaches claim 3 wherein said DBO is configured to stop exchanging said data between said mobile unit and said BTS when said mobile is not in said HDR area (page 5, L16-35 teaches mobile receiving SMS over cell broadcast which one skilled understands can be continuously monitored for local carrier service changes as the mobile roams. The examiner also notes that the mobile unit must continuously monitor for HDR coverage as it roams since roaming out of coverage will terminate the HDR service).

As per **claim 7**, Magnusson teaches claim 6 wherein said determining means invokes said exchanging means to automatically exchange said data between when said wireless mobile unit is in said HDR area (page 5, L30-35 teaches system selecting the optimal carrier service, eg. HDR, based on the application chosen).

As per **claim 8**, Magnusson teaches claim 6 wherein said determining means invokes said automatically exchanging means to exchange said data between when said wireless mobile unit is in said HDR area (page 5, L30-35 teaches system selecting the optimal carrier service, eg. HDR, based on the application chosen) and said determining means determines said need to exchange said data between said wireless mobile unit and BTS (page 6, L30 to page 7, L20 teaches an example whereby the user operates a computer and the system determines which carrier service to use for transmitting/exchanging data).

As per **claim 9**, Magnusson teaches claim 7 wherein said exchanging means continuously detects when said wireless mobile unit is in said HDR CDMA area (page 5, L16-35 teaches mobile receiving SMS over cell broadcast which one skilled understands can be continuously monitored for local carrier service changes as the mobile roams. The examiner also notes that the mobile unit must continuously monitor for HDR coverage as it roams since roaming out of coverage will terminate the HDR service).

As per **claim 10**, Magnusson teaches claim 6 **but is silent on** wherein said exchanging means transmits a logon name and password to said BTS to authenticate said wireless mobile unit.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

Art Unit: 2683

As per **claim 11**, Magnusson teaches claim 9 wherein said exchanging means stops an exchange of said data between said mobile unit and said BTS when said mobile is not in said HDR area (page 5, L16-35 teaches mobile receiving SMS over cell broadcast which one skilled understands can be continuously monitored for local carrier service changes as the mobile roams. The examiner also notes that the mobile unit must continuously monitor for HDR coverage as it roams since roaming out of coverage will terminate the HDR service).

As per **claim 13**, Magnusson teaches claim 12 **but is silent on** wherein said exchanging means transmits a logon name and password to said BTS to authenticate said wireless mobile unit.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

As per **claim 15**, Magnusson teaches claim 12 **but is silent on** comprising:

Pinging said BTS to detect when said wireless mobile unit is in said HDR CDMA area after said invoking step and prior to exchanging step.

Magnusson teaches the BTS sending an SMS cell broadcast message which the mobile will receive to determine available carrier services (page 5, L16-35) – once received, the mobile would then exchange data via an optimal service. The “PING” command is a well known industry standard supported by TCP/IP and one skilled would use to determine availability of BTS services if/when a SMS cell broadcast message is not received.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it pings said BTS to detect when said wireless mobile unit is in said HDR area after said invoking step and prior to exchanging step, to provide means for detecting if the mobile can use HDR services for data transmission.

As per **claim 16**, Magnusson teaches claim 15 wherein said pinging step is performed by said data burst optimizer (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application and hence one skilled would expect said processor/DBO to perform pinging step as well).

Art Unit: 2683

As per **claim 17**, Magnusson teaches a method for exchanging data between a wireless mobile unit and a BTS, said method comprising:

Detecting when said wireless mobile is in a HDR area (page 5, L8-35 teaches system selecting the optimal carrier service, eg. HDR, based on an SMS cell broadcast message);

Determining a need to exchange data between said mobile and said BTS (user operates computer application to transmit/receive data via mobile/SIM, page 5, L30-35);

Invoking a DBO to synchronize an exchange of said data between said mobile and said BTS (page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21);

Exchanging said data between said mobile and said BTS when said mobile is in said HDR area (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application);

**But is silent on** Transmitting a logon name and password from said mobile to said BTS to authenticate said mobile unit and CDMA, determining strength of HDR carrier signal by BTS exceeds a predetermined level and automatic exchange.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

O'Carroll teaches a communication system for wireless communications users (CDMA, C4, L35-47), discloses use of signal strength (C3, L23-27 and C8, L23-29) and will automatically transmit data when there is data to send (figure 7 shows that communications will automatically occur when the unit is within a certain area and there is data to transmit).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it uses a signal strength indicator AND use of CDMA communications AND determining if by determining whether a signal strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level AND automatically exchange data and using CDMA when the strength indicator detects said wireless mobile unit is in said HDR CDMA area and the processor determines a need for exchanging data between the mobile and BTS AND said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password and for the unit to determine when it can transmit data at high(er) data rates.

As per **claim 19**, Magnusson teaches claim 17 **but is silent on** comprising:

Pinging said BTS to detect when said wireless mobile unit is in said CMDA HDR area after said invoking step and prior to exchanging step.

Magnusson teaches the BTS sending an SMS cell broadcast message which the mobile will receive to determine available carrier services (page 5, L16-35) – once

Art Unit: 2683

received, the mobile would then exchange data via an optimal service. The "PING" command is a well known industry standard supported by TCP/IP and one skilled would use to determine availability of BTS services if/when a SMS cell broadcast message is not received.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it pings said BTS to detect when said wireless mobile unit is in said HDR area after said invoking step and prior to exchanging step, to provide means for detecting if the mobile can use HDR services for data transmission.

As per **claim 20-21**, Magnusson teaches claim 19/17 wherein said pinging step is performed by said data burst optimizer (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application and hence one skilled would expect said processor/DBO to perform pinging step as well).

As per **claim 26**, Magnusson teaches a computer readable medium including computer program, said program implementing a method for exchanging data between mobile and BTS (figure 1 shows laptop connected to mobile/SIM which inherently use computer/instructions to provide communications) comprising:

A first code segment for detecting when said wireless mobile is in a HDR area (page 5, L8-35 teaches system selecting the optimal carrier service, eg. HDR, based on an SMS cell broadcast message);

A second code segment for determining a need to exchange data between said mobile and said BTS (user operates computer application to transmit/receive data via mobile/SIM, page 5, L30-35);

A third code segment for invoking a DBO to synchronize an exchange of said data between said mobile and said BTS (page 6, L13-29 teaches system using carrier data for selection of an optimal system for data exchange and example disclosed on page 6, L30 to page 7, L21);

A fourth code segment for exchanging said data between said mobile and said BTS when said mobile is in said HDR area (page 7, L15-21 teaches an example whereby the processor/DBO selects optimal means, eg. HDR, for exchanging data based on the user's selected application).

**But is silent on a signal strength indicator AND use of CDMA communications AND determining if by determining whether a signal strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level AND automatically exchange data and using CDMA when the strength indicator detects said wireless mobile unit is in said HDR CDMA area and the processor determines a need for exchanging data between the mobile and BTS.**

**O'Carroll teaches a communication system for wireless communications users (CDMA, C4, L35-47), discloses use of signal strength (C3, L23-27 and C8, L23-29) and will automatically transmit data when there is data to send (figure 7 shows that**



Art Unit: 2683

communications will automatically occur when the unit is within a certain area and there is data to transmit).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that it uses a signal strength indicator AND use of CDMA communications AND determining if by determining whether a signal strength of a HDR carrier signal broadcast by a BTS exceeds a predetermined level AND automatically exchange data and using CDMA when the strength indicator detects said wireless mobile unit is in said HDR CDMA area and the processor determines a need for exchanging data between the mobile and BTS, to provide means for the unit to determine when it can transmit data at high(er) data rates.

As per **claim 27**, Magnusson teaches claim 26 **but is silent on** wherein a fifth code segment for transmitting a logon name and password to said BTS to authenticate said wireless mobile unit.

Magnusson teaches use of a computer/laptop PC (figure 1, #3) and typically user logon name and password for security authentication (eg. via Microsoft Windows OS). One skilled would use the well known method of requiring Logon/password for security purposes. Cellular systems also utilize security precautions to prevent fraud and cloning whereby the user is authenticated during the registration process.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Magnusson, such that said DBO transmits a logon name and password to said BTS to authenticate said wireless mobile unit, to provide authentication of the user via a logon name and password.

As per **claim 32**, Magnusson teaches claim 12 **but is silent on** wherein said exchanging data occurs at a speed of 2.4Mbps (Magnusson teaches high speed circuit switched data which reads on the claim, as does O'Carroll's teaching of CDMA).

### ***Allowable Subject Matter***

1. Claims 14, 18, 22-25 and 28-29 are allowed.
2. Per the Advisory Action previously transmitted, the independent claims appear to be novel if amended with claims 8 and 10.

Art Unit: 2683

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta  
PRIMARY EXAMINER  
6-1-2005

A handwritten signature in black ink, appearing to be 'SD' or 'S.D.', written in a cursive style.